# Implementing the Digital TV Transition

The nations 1,600 television stations are converting from traditional analog technology to a digital television format. Digital television (DTV) is a new, more efficient technology for transmitting and receiving broadcast television signals. But DTV signals are not compatible with today's analog TV sets in most American homes. Under the Telecommunications Act of 1996, the amount of spectrum given to television station owners was doubled. The policy rationale for this was to enable the stations to transition US consumers to digital TV without interruption of analog broadcasts. But after ten years of digital TV broadcasts, only a small number of US households have made the switch to DTV, delaying the return of valuable spectrum that could be used by emergency officials and auctioned to offset federal deficit spending.

Now that President Bush has signed the Deficit Reduction Act which includes the Digital Television Transition and Public Safety Act (DTV Act), a clearer picture of the digital television transition is developing. The purpose of the DTV Act is to prepare US consumers for the end of free, over-the-air, analog broadcasts. Mainly, this is to be accomplished by subsidizing the purchase of digital-to-analog converter boxes that will extend the life of current TVs into the age of digital TV broadcasting. Additionally, the law allows the proceeds from the auction of returned analog TV spectrum to be used for other national communications priorities.

Below is a quick outline of the timeline for implementing the new law and the requirements it makes on various government bodies – and consumers – to end analog television broadcasts in the US on February 17, 2009. Following the implementation schedule are some outstanding questions that either Congress or the Federal Communications Commission (FCC) will return to in order to ensure the availability of universal, free, over-the-air television broadcasts in the age of digital television.

#### 2006-2007

**September 30, 2006** Before this date the FCC is to assess and deposit in the Treasury extraordinary fees for licenses totaling \$10,000,000 as offsetting receipts.

October 2006 Although not an explicit mandate of the DTV Act, Congress expects the National Telecommunications and Information Administration<sup>1</sup> to issue rules for a digital-to-analog converter box subsidy program within nine months, when Fiscal Year 2007 begins. The rules would cover: 1) the content and distribution of coupon request forms and coupons; 2) consumer redemption of, and retailer reimbursement for, the coupons; 3) the types of converter boxes that shall be eligible for purchase with a coupon; 4) certification, education, and auditing of retailers involved in the program; and 5) consumer and retailer appeals.<sup>2</sup>

October 2006 – June 30, 2008 The NTIA may borrow money from the US Treasury to begin implementing various programs mandated by the DTV Act.<sup>3</sup>

October 2006 -- September 2008 The NTIA is to make payments of up to \$30 million to reimburse the Metropolitan Television Alliance<sup>4</sup> for costs incurred in the design and deployment of a temporary digital television broadcast system to ensure that New York City area broadcasters can provide the area with digital TV.

<sup>&</sup>lt;sup>1</sup> A part of the Department of Commerce created in 1978, the National Telecommunications and Information Administration (NTIA) is the President's principal adviser on telecommunications and information policy issues, and in this role frequently works with other Executive Branch agencies to develop and present the Administration's position on these issues.

<sup>&</sup>lt;sup>2</sup> The NTIA may spend up to \$990 million from the Digital Television Transition and Public Safety Fund through September 2009 to carry out the converter box program. It can spend up to \$100 million on administrative expenses. Up to \$5 million can be spent for consumer education concerning the digital television transition and the availability of the digital-to-analog converter box program. If the NTIA tells Congress that program funds are insufficient, an additional \$60 million will be made available for administrative.

<sup>&</sup>lt;sup>3</sup> Includes Digital-to-Analog Converter Box, Public Safety Interoperable Communications, NYC 9/11 Digital Transition, Low Power TV Conversion & Upgrade, National Alert Warning, and Enhance 911 programs.

<sup>&</sup>lt;sup>4</sup> Organization formed by New York City television broadcast station licensees to locate new shared facilities as a result of the attacks on September 11, 2001 and the loss of use of shared facilities that housed broadcast equipment.

October 2006 – September 2009 The NTIA shall make payments of no more than \$43.5 million to implement the ENHANCE 911 Act of 2004.<sup>5</sup>

October 2006 -- September 2010 Working with the Department of Homeland Security the NTIA will establish and implement a \$1 billion grant program to assist public safety agencies in the acquisition of, deployment of, or training for the use of interoperable communications systems.

October 2006 -- September 2012 The NTIA is to make payments of no more than \$156 million to implement a unified national alert system. The NTIA shall use \$50 million to implement a tsunami warning and coastal vulnerability program.

October 2007 -- September 2009 The NTIA is to make payments of up to \$10 million to implement and administer a program through which eligible low-power television stations<sup>6</sup> may receive compensation toward the cost of the purchase of a digital-to-analog conversion devices that enable them to convert incoming digital TV signals of their corresponding full-power television stations to analog format for transmission on the low-power television stations' analog channels. Requests for such compensation must be made on or before February 17, 2009. Priority compensation shall be given to non-profit corporations and stations that serve rural areas of fewer than 10,000 viewers.

#### 2008

January 1, 2008 -- March 31, 2009 US households may obtain \$40 coupons towards purchase of digital-to-analog converter boxes by making a request. All coupons expire 3 months after issuance. The NTIA shall ensure that each requesting household receives, via the United States Postal Service, no more than two coupons.

<sup>&</sup>lt;sup>5</sup> The purpose of that legislation is to coordinate 911 services and E-911 services, at the Federal, State, and local levels.

<sup>&</sup>lt;sup>6</sup> A low-power television broadcast station, Class A television station, television translator station, or television booster station that is itself broadcasting exclusively in analog format; and that has not purchased a digital-to-analog conversion device prior to the date of enactment of the Digital Television Transition and Public Safety Act of 2005.

**January 28, 2008** The FCC must conduct the auction of the licenses for recovered analog spectrum, commencing the bidding not later than this date, and shall deposit the proceeds of such auction in the US Treasury no later than June 30, 2008.

**June 30, 2008** By this date, the FCC is to have deposited in the Treasury proceeds from the auction of spectrum currently used for analog TV broadcasts.

October 2008 – September 2009 The NTIA shall make payments of no more than \$65 million to implement a program to reimburse rural low-power television stations for upgrading to digital TV technology. Such reimbursements shall be issued to eligible stations no earlier than October 1, 2010. Priority compensation shall be given to non-profit corporations and stations that serve rural areas of fewer than 10,000 viewers.

#### 2009

**February 17, 2009** Analog TV broadcasts from full-power TV stations in the US ends. Low-power stations, including Class A stations, may continue broadcasting in analog format after this day, subject to future decisions by the FCC on how to complete the digital television transition for such stations.

**February 18, 2009** By this date the FCC must require that all TV broadcasting occur only on channels between channels 2 and 36, inclusive, or 38 and 51, inclusive (between frequencies 54 and 698 megahertz, inclusive). If low-power stations want to be compensated for digital-to-analog conversion devices, they must make request by end of day.

**September 30, 2009** On the last day of Fiscal Year 2009, the Secretary of the Treasury shall transfer \$7.363 billion from the Digital Television Transition and Public Safety Fund to the general fund of the Treasury.

## **Outstanding DTV Transition Issues**

<sup>&</sup>lt;sup>7</sup> Low-power stations other than Class A stations may also continue such analog broadcasting above channel 51, subject to future FCC decisions, so long as those stations' use of those channels is secondary to the use of those channels by the auction winners and public safety officials.

At their first open meeting of the new year, both FCC Commissioners and staff identified the DTV transition as a major priority for 2006. Anticipating the passage of the DTV Act, the Commission reported on the status of the DTV transition to date. Approximately 90% of US TV stations are currently airing digital TV broadcast and approximately 95% of stations have chosen their permanent digital television channel. Completing the task of deciding final channel placements for all digital TV stations was identified as a major priority by FCC Chairman Kevin Martin, Commissioner Jonathon Adelstein and Media Bureau Chief Donna Gregg. Commissioner Adelstein identified additional issues that must be addressed to make the transition a success including the public interest obligations of digital TV broadcasters, the disclosure requirements of licensees, educating consumers about the transition, and the sale of analog TV sets.

## Public Interest Obligations and Disclosure

Because of the enhanced capability of digital television technology, the FCC first asked for public comment on the public interest obligations of digital television broadcasters in July 1995.8 Since that time, a blueribbon Presidential advisory committee has reviewed and made recommendations on broadcasters' public interest obligations, while the FCC has opened a proceeding to examine the Advisory Committee's recommendations and initiated a proceeding on the disclosure requirements of broadcasters. Responding in part to this long delay, the FCC's own Consumer Advisory Committee, appointed by FCC Chairman Kevin Martin, asked the Commission to complete these proceedings by May 18, 2006.

In addition, in a Febuary 2005 decision on whether or not to require cable operators to carry all of digital TV stations' multicast channel (see discussion of multicast must carry below), the FCC ruled:

Nothing in this Order diminishes the Commission's commitment to completing action on the multiple open proceedings on localism and on the public interest obligations of digital

 $<sup>^8</sup>$  See http://www.fcc.gov/Bureaus/Mass\_Media/Notices/1995/fcc95315.txt

<sup>&</sup>lt;sup>9</sup> See *Charting the Digital Future*, the final report of the President's Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters (http://www.benton.org/publibrary/piac/report.html).

<sup>&</sup>lt;sup>10</sup> See Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations (MM 20 Docket No. 00–168; FCC-05-27A1)

broadcasters. We believe the public interest and localism proceedings are essential components of the Commission's efforts to complete the transition to digital television. The Commission intends to move forward on these decisions within the next few months and complete action in these dockets by the end of the year. 11

To date, the Commission has not acted on the public interest obligations of digital broadcasters. 12

### **Consumer Education**

The DTV Act allows the NTIA to spend up to \$5 million educating consumers about the transition to digital TV and the availability of converter box subsidies. An earlier, House version of the DTV Act included a three-part consumer education plan:

- 1) the NTIA and FCC would make public aware of a) the deadline for analog TV broadcasts, b) consumers' options after the deadline and c) the converter box program;
- 2) television set manufacturers would be required to warn analog TV consumers of the coming digital TV transition with warning labels on sets sold in the US; and
- 3) television broadcasters would have to air a PSA campaign while cable and satellite would have to include notices about the transition in their monthly bills.

These provisions were dropped in the final version of the DTV Act, but FCC Commissioner Adelstein and Media Bureau Chief Gregg admitted there's lots more to be done to alert consumers about the coming end of analog TV. The FCC's current educational campaign has an online home at http://www.dtv.gov/

#### DTV Tuner Requirement

In early November 2005, the FCC set March 1, 2007 as the date for which all TV receivers sold in the US must include the capability to

<sup>&</sup>lt;sup>11</sup> Second Report and Order and First Order on Reconsideration *In the Matter of:* Carriage of Digital Television Broadcast Signals: Amendments to Part 76 of the Commission's Rules (CS Docket No. 98-120) (Adopted February 10, 2005)

<sup>&</sup>lt;sup>12</sup> For more see *Citizen's Guide to Public Interest Obligations* see http://www.benton.org/pioguide/publicstandard.html.

receive digital television.<sup>13</sup> But in the same order the FCC highlighted that consumer awareness of whether a television can receive off-the-air DTV signals or only off-the-air analog signals is critical to ensuring that consumer expectations are met. The Commission promised to move swiftly to address point-of-sale consumer education saying that it would further consumer education if manufacturers and retailers would provide marketing information to consumers and/or clearly label new television sets. In the interim, the FCC encouraged manufacturers and retailers to clearly label and identify the tuning capabilities of new TV sets regarding whether or not specific models are able to receive off-the-air digital television signals.

#### Digital Television and Cable

Congress expects that the February 17, 2009, firm deadline will have little impact on most television households. Only consumers relying on over-the-air broadcasts should need to participate in the converter-box program and just under 15% of US television households relied exclusively on over-the-air transmission as of June 2004, according to the FCC. By contrast, the FCC reports that 92.3 million households, representing just over 85%, subscribed to cable or satellite TV. But many believe that pay TV subscribership raises as many issues as it may solve.

The House version of the DTV Act included extensive provisions allowing for cable and satellite operators to convert broadcasters digital TV signals to analog signals. These provisions, however, were stripped from the bill before final passage. The cable industry believes now that...

The National Association of Broadcasters has identified multicast must carry as its number one policy priority. In an order noted above, the FCC voted 4-1 last February to ban TV stations from demanding cable carriage of multiple DTV services, affirming a 2001 ruling that cable is obligated to carry just one service per station and nothing else after broadcasters complete their transition to digital-only transmission. The FCC also voted 5-0 that cable does not have to carry both analog and digital services of local TV stations during the transition. In the 4-1 vote, only then-Commissioner Kevin Martin

<sup>&</sup>lt;sup>13</sup> On July 1, 2004, the tuner requirement was applied to 50% of large sets (screen sizes 36" and larger), and last July (July 1, 2005), the tuner requirement was applied to all large sets and to 50% of mid-size sets (25"- 36"). Beginning March 1, 2006, DTV tuners will be required in all mid-size sets as well.

dissented saying the decision provided no incentive for broadcasters to invest in and develop local news, local weather, local sports, coverage of local elections and government proceedings, and foreign language programming because they would not be guaranteed coverage on local cable systems. In addition to now-Chairman Martin, two commissioners indicated their votes could have been reversed – if the Commission had first addressed the public interest obligations of digital TV broadcasters.

In April 2005, the National Association of Broadcasters asked the FCC to reconsider the February 2005 decision. <sup>14</sup> No action has been taken yet.

<sup>&</sup>lt;sup>14</sup> See http://www.nab.org/newsroom/pressrel/filings/ReconPetitionCarriage42105.pdf